

## SEQUENCE LISTING

<110> Banerjee, Subhashis  
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 Tracey, Daniel E  
 Chartash, Elliot K  
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 Barchuk, William T  
 Yan, Philip  
 Murtaza, Anwar  
 Salfeld, Jochen G  
 Fischkoff, Steven

<120> TREATMENT OF ANEMIA USING TNF $\alpha$  INHIBITORS

<130> BPI-192

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<150> 60/397,275

<151> 2002-07-19

<150> 60/411,081

<151> 2002-09-16

<150> 60/417,490

<151> 2002-10-10

<150> 60/455,777

<151> 2003-03-18

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<170> FastSEQ for Windows Version 4.0

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<212> PRT

<213> Artificial Sequence

<220>

<223> Mutated human antibody

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Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
			20					25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35					40				45				
Tyr	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55					60				

# BPI-192

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Arg Ala Pro Tyr  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
 100 105

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 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr  
 20 25 30  
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val  
 50 55 60  
 Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr  
 65 70 75 80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Lys Val Ser Tyr Leu Ser Thr Ala Ser Ser Leu Asp Tyr Trp Gly  
 100 105 110  
 Gln Gly Thr Leu Val Thr Val Ser Ser  
 115 120

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 <223> Mutated human antibody

<400> 3  
 Gln Arg Tyr Asn Arg Ala Pro Tyr Xaa  
 1 5

<210> 4  
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## BPI-192

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<223> Xaa = Tyr or Asn

<223> Mutated human antibody

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Val	Ser	Tyr	Leu	Ser	Thr	Ala	Ser	Ser	Leu	Asp	Xaa
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Ala	Ala	Ser	Thr	Leu	Gln	Ser
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Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val	Glu
1				5					10					15	

Gly

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<211> 11

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<400> 7

Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr	Leu	Ala
1				5					10	

<210> 8

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<400> 8

Asp Tyr Ala Met His  
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<220>

<223> Mutated human antibody

<400> 9

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Ile	Gly
1				5				10						15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly	Ile	Arg	Asn	Tyr
		20						25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35					40					45			
Tyr	Ala	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55				60					
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75					80
Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Lys	Tyr	Asn	Ser	Ala	Pro	Tyr
				85					90					95	
Ala	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							

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<223> Mutated human antibody

<400> 10

Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Arg
1				5				10						15	
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Asp	Tyr
			20					25					30		
Ala	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Asp	Trp	Val
		35					40					45			
Ser	Ala	Ile	Thr	Trp	Asn	Ser	Gly	His	Ile	Asp	Tyr	Ala	Asp	Ser	Val
	50					55				60					
Glu	Gly	Arg	Phe	Ala	Val	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ala	Leu	Tyr
65					70					75					80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85						90					95	
Thr	Lys	Ala	Ser	Tyr	Leu	Ser	Thr	Ser	Ser	Ser	Leu	Asp	Asn	Trp	Gly
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## BPI-192

Gln Gly Thr Leu Val Thr Val Ser Ser  
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<210> 11  
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<220>  
<223> Mutated human antibody

<400> 11  
Gln Lys Tyr Asn Ser Ala Pro Tyr Ala  
1 5

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<400> 12  
Gln Lys Tyr Asn Arg Ala Pro Tyr Ala  
1 5

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<400> 13  
Gln Lys Tyr Gln Arg Ala Pro Tyr Thr  
1 5

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<400> 14  
Gln Lys Tyr Ser Ser Ala Pro Tyr Thr  
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Gln Lys Tyr Asn Ser Ala Pro Tyr Thr  
1 5

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<400> 16  
Gln Lys Tyr Asn Arg Ala Pro Tyr Thr  
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<220>  
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<400> 17  
Gln Lys Tyr Asn Ser Ala Pro Tyr Tyr  
1 5

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<400> 18  
Gln Lys Tyr Asn Ser Ala Pro Tyr Asn  
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<223> Mutated human antibody

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Gln Lys Tyr Thr Ser Ala Pro Tyr Thr  
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<210> 20

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<400> 20

Gln Lys Tyr Asn Arg Ala Pro Tyr Asn  
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<210> 21

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<400> 21

Gln Lys Tyr Asn Ser Ala Ala Tyr Ser  
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<210> 22

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<400> 22

Gln Gln Tyr Asn Ser Ala Pro Asp Thr  
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<210> 23

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<400> 23

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Gln Lys Tyr Asn Ser Asp Pro Tyr Thr  
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Gln Lys Tyr Ile Ser Ala Pro Tyr Thr  
1 5

<210> 25  
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<400> 25  
Gln Lys Tyr Asn Arg Pro Pro Tyr Thr  
1 5

<210> 26  
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<400> 26  
Gln Arg Tyr Asn Arg Ala Pro Tyr Ala  
1 5

<210> 27  
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<220>  
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<400> 27  
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asn  
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<220>  
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<400> 28  
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Lys  
1 5 10

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<400> 29  
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Tyr  
1 5 10

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<400> 30  
Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asp  
1 5 10

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<400> 31  
Ala Ser Tyr Leu Ser Thr Ser Phe Ser Leu Asp Tyr  
1 5 10

<210> 32  
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<220>

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Ala	Ser	Tyr	Leu	Ser	Thr	Ser	Ser	Ser	Leu	His	Tyr
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<223> Mutated human antibody

<400> 33

Ala	Ser	Phe	Leu	Ser	Thr	Ser	Ser	Ser	Leu	Glu	Tyr
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<210> 34

<211> 12

<212> PRT

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<210> 35

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<223> Mutated human antibody

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<210> 36

<211> 321

<212> DNA

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<220>

<223> Mutated human antibody

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## BPI-192

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gggaaagccc ctaagctcct gatctatgct gcatccactt tgcaatcagg ggtcccatct 180
cggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag cctacagcct 240
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<220>

<223> Mutated human antibody

<400> 37

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ccagggaagg gcctggaatg ggtctcagct atcacttgga atagtgggtca catagactat 180
gcggactctg tggagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
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taccttagca ccgcgtcctc ccttgactat tggggccaag gtaccctggg caccgtctcg 360
agt 363
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